

temperature of the glass particles contained in the stream. Accordingly, said particles will be subjected to thermophoretic repulsion forces generated by the walls having a higher temperature, which will tend to confine them in the central part of the reactor for the whole height of it, thus avoiding the unwanted deposition onto the reactor's walls.

Add a new page 32 after the claims, adding the following ABSTRACT OF THE DISCLOSURE. A new, separate page 32 including the ABSTRACT OF THE DISCLOSURE is enclosed.

--ABSTRACT OF THE DISCLOSURE

A method for manufacturing a glass preform includes supplying a first gaseous or vapor phase composition to a reaction chamber; supplying water as a second gaseous or vapor phase composition to the reaction chamber; reacting the water and the first gaseous or vapor phase composition to form an aerosol of glass particles; directing the aerosol along the reaction chamber, out of the reaction chamber, and toward a target; and depositing glass particles of the aerosol onto the target. The first gaseous or vapor phase composition is disposed to provide a hydrolyzable glass precursor. Walls of the reaction chamber have a temperature gradient in which a temperature of the walls increases in a direction of flow of the aerosol along the reaction chamber. Alternatively, a flow of the aerosol along the reaction chamber has a temperature gradient in which a temperature of the aerosol increases in the direction of flow.--

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